ILLINOIS STATE GEOLOGICAL SURVEY

115 South Washington Street
Naperville, Illinois 60540
June 6, 1966

Dr. A. J. Zeisel
NIPC
400 West Madison
Chicago, Illinois

Dear Art:

This is in reply to your letter of May 27, to Jim Hackett, requesting information on the geology of an area in Sec. 6, T.42N., R11E., Cook County, Illinois.

Our regional maps show that the glacial drift is approximately 175 feet thick overlying the Niagaran Series. Sand sands more than 25 feet thick are present in the drift less than one mile to the south and may extend beneath the site; however, as our nearest well control is approximately one-half mile to the southeast, we cannot confirm this. Wells in the vicinity also show sands and gravels interbedded within the drift sequence, but their distribution is erratic and while some interbedded sand and gravel may be present at this site, its depth and thickness would be difficult to predict.

There is a sand and gravel pit present on the site, but when we visited the area on June 2, 1966, this pit appeared to be abandoned. This sand and gravel deposit seems to be part of a series of poorly developed kames extending north and south through the site. The deposit is poorly sorted and contains inclusions of silt and till. Because of the nature of this deposit, we would not expect the sand and gravel to extend to any great depth but there is no indication that the base of this deposit was encountered when the pit was being mined and drilling would be necessary to positively determine its thickness.

Overburden ranges from three feet to more than ten feet and consists of silty clay overlying a discontinuous layer of silty clay till.

Water is present in the base of the pit and though it seemed to be at a higher level than normal because of the recent rains, the presence of a few cattails and reeds suggests that the pit intersects the top of the zone of saturation and will contain some water in its lower parts throughout the year.

In summary, there is approximately 175 feet of glacial drift in this area which may contain basal and interbedded sand and gravel deposits. Sand and gravel was mined from a kamic deposit on the site; however, this operation has been abandoned and the extent of the deposit remaining is not known. A drilling program should be initiated if more definite data are needed.

Yours truly,

George M. Hughes
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and Geophysical Exploration